

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2004/000169

A. CLASSIFICATION OF SUBJECT MATTER

G01N33/543, C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: G01N33/543, C12Q1/68, G01N33/68, G01N33/53, G01N33/50, G01N33/48, C12Q1/00, G01N33/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Chinese patent documents(1985~)Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CNPAT&CNKI&WPI&EPODOC & PAJ: gene chip, biochip, DNA chip, microarray(s), micro array(s)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN, Y, 2280908 (Gao Jinsong) 06.May.1998 (06.05.1998), Page 1-2, Fig.1-3	50、51
X	CN, A, 1273609 (HYSEQ INC) 15.Nov.2000 (15.11.2000), Page3-5、13-28、67-73, Claims	36、37、59 50-53 38-42、57、58
Y	CN, A, 1274758 (Lu Zuhong) 29.Nov.2000 (29.11.2000), Page3-10, Fig.1、2	52、53 1-40、43-46、55、56 52、53
A	CN, A, 1281147 (Wu Chang) 24.Jan.2001 (24.01.2004), Page1	1-35 59
Y	CN, A, 1335501 (SHANGHAI JINGTAI BIOLOGICAL TECHNOLOGY COMPANY) 13.Feb.2002 (13.02.2002), Page1-4, Fig.1-3	36、37、52、53 1-35、38-51、54-58、

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
07.Jul.2004(07.07.2004)

Date of mailing of the international search report

22 · JUL 2004 (22 · 07 · 2004)

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN, A, 1343790 (HENAN PROV BIO TECHNOLOGY DEV CENT) 10.Apr.2002 (10.04.2002), Page1-3, Fig.1-3	61
Y	Jornal of Mechanical Strength, Vol.23, No.4, 2001, Cui Dafu "DNA chips research based on bioMEMS technologies", Page471-475	52、 53
A	WO, A1, 02090963 (Combimatrix Corporation) 14.Nov.2002 (14.11.2002), Page8、 9, Fig.1	1-35、 41-42
X		59
A		1-58、 60
A	CN, A, 1314493 (SHANGHAI BODAO GENE DEV CO LTD) 26.Sep.2001 (26.09.2001), The whole document	1-56
A	CN,A,1325026(ChongQing University)05.Dec.2001(05.12.2001),The whole document	1-56
PA	CN,A,1417348(Union Gene Technology LTD.)14.May.2003(14.05.2003),The whole document	1-59
PA	CN,A,1448723(Chengdu Kuachang Science & Technology LTD.)15.Oct.2003(15.10.2003).The whole document	1-56
A	US,A, 5545531 (Richard P. Rava etal.) 13.Aug.1996(13.08.1996), The whole document	1-56
A	US,A1,2002009728(Michael Bittner etal.)24.Jan.2002(24.01.2002),The whole document	1-56
A	WO,A1,02052045(Aviva Biosciences)04.Jul.2002(04.07.2002),The whole document	1-56

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Claims 1-56 and claims 57-60 and claim 61. Claims 1-56 relate to a chip for analysis, a top component or a base component of the chip, or a substrate. Claims 57-60 relate to a qualitative or quantitative analysis. Claim 61 relates to a detection equipment.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2004/000169

Patent document cited in search report	Publication date	Patent family member(s)	Publication Date
CN, Y, 2280908	06.May.1998	NONE	
CN, A, 1273609	15.Nov.2000	US, A1, 2003108897	12.Jun.2003
		WO, A1, 9909217	25.Feb.1999
		AU, A, 8908198	08.Mar.1999
		EP, A1, 1012335	28.Jun.2000
		KR, A, 2001022917	26.Mar.2001
		JP, T, 2001514906T	18.Sep.2001
		US, A1, 2002034737	21.Mar.2002
		US, B1, 6383742	07.May.2002
CN, A, 1274758	29.Nov.2000	WO, A, 0071746	30.Nov.2000
		AU, A, 4535400	12.Dec.2000
CN, A, 1281147	24.Jan.2001	NONE	
CN, A, 1335501	13.Feb.2002	WO, A, 02077152	03.Oct.2002
CN, A, 1343790	10.Apr.2002	NONE	
WO, A, 02090963	14.Nov.2002	NONE	
CN, A, 1314493	26.Sep.2001	NONE	
CN, A, 1325026	05.Dec.2001	NONE	
CN, A, 1417348	14.May.2003	NONE	
CN, A, 1448723	15.Oct.2003	NONE	
US, A, 5545531	13.Aug.1996	US, A, 5874219	23.Feb.1999
		US, A, 2002018991	14.Feb.2002
US, A1, 2002009728	24.Jan.2002	NONE	
WO, A1, 02052045	04.Jul.2002	US, A, 2002123134	05.Sep.2002